

- **What is claimed:**

1. A method of producing a precursor material suitable for the production of mechanical objects by a forming process, comprising the

5 steps of

introducing natural, relatively hard, solid vegetable material consisting substantially of cellulose;

combining starch;

adding a binding agent to produce a first mixture;

10 drying said first mixture; and

milling said dried mixture to produce a precursor powder.

2. A method according to claim 1, wherein said first mixture is dried for between 20 to 60 minutes.

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3. A method according to claim 2, wherein said first mixture is dried at a temperature of between 60 to 80 degrees Celsius.

4. A method according to claim 1, wherein the fineness of said  
20 precursor powder varies depending upon the nature of the mechanical object.

5. A method according to claim 1, wherein said binding agent is

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produced by a process of polymerisation of initial components.

6. A method according to claim 5, wherein an initial component  
is a lipid.

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7. A method according to claim 6, wherein said polymerisation is  
encouraged by the introduction of oxalic acid catalyst.

8. A method according to claim 1, wherein precursor material is  
10 formed into a mechanical object by the application of heat and pressure.

9. A method according to claim 8, wherein the application of said  
heat and pressure is performed as a two stage procedure with a breathing  
period between a first application of heat and pressure and a second  
15 application of heat and pressure.

10. A first mixture suitable for the production of mechanical  
objects, consisting of:

solid material derived from a vegetable source of a substantially solid  
20 consistency;  
starch; and  
a binding agent.

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11. A first mixture according to claim 10, wherein said binding agent includes a lipid compound.

12. A first mixture according to claim 11, wherein the proportions  
5 of said components are:

20 to 95 per cent of said vegetable material;

0.1 to 2 per cent of said starch; and

0.1 to 3 per cent of said lipid compound.

10 13. A first mixture according to claim 12, also including at least one starch derivative, and/or at least one synthetic resin and/or a mixture of high molecular weight proteins.

15 14. A first mixture according to claim 10, wherein said solid vegetable material is derived from husks, straw, food waste, starch or sawdust.

16. A first mixture according to claim 10, wherein said starch is agricultural starch.

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16. A first mixture according to claim 11, wherein said lipid compound is produced by a process of polymerisation.

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17. A precursor material derived from said first mixture produced according to claim 10 by a process of drying and milling.

18. A mechanical object derived from said precursor material produced according to claim 17 by a process involving the application of  
5 heat and pressure.